## 'EXORCISING THE EVIL AIR'

Marium Nafisa describes how she nursed a patient suffering from tetanus in rural Bangladesh, where the people were poor and drugs scarce and expensive

EFORE arriving in Bangladesh I had never come across a case of tetanus outside of a textbook. However, in Bangladesh, tetanus is common, particularly in agrarian communities. Few survive the disease or the complications arising from lack of proper treatment and care; hospitalisation is rare and drugs are always scarce. The problem is exacerbated by social taboos and beliefs, as well as poverty.

The case I was involved with was that of a 16-year-old boy called Alam. As the oldest son of a family of six, he worked with his father on their small plot of land. To survive, the family sold products from their kitchen garden, homemade sweets and also hired themselves out as day labourers.

They lived in a one-room hut, which was in need of repair. The family had two meals a day of rice, mashed vegetables or curry, occasionally supplemented by fish, meat, bread, milk and eggs.

Alam had been a healthy boy until 1986, when he developed septic arthritis of the left knee. He was ill for a few months and away from work. He had taken antibiotics but to little effect.

When his family could no longer afford more, they stopped medication and treated him with herbs which worked well. He kept well for several weeks before developing a fever and was in pain, especially around the jaw and epigastrium. This worsened and Alam found it difficult to chew and swallow.

His parents, thinking it was seasonal fever, ignored it. But Alam's fever continued to rise, and his condition deteriorated rapidly. He stopped eating, developed convulsions, headaches, and photophobia. Finally, a qualified doctor

was called in. He diagnosed tetany and treated him with intramuscular ampicillin 500mg, intramuscular hyoscine butylbromide 50g, and magnesium trisilicate.

When Alam's condition continued to worsen, his anxious parents called in another doctor. He, too, diagnosed tetany, but added that it could be tetanus. On top of the drugs already prescribed he added intravenous calcium gluconate 10ml and intramuscular chlorpromazine (Largactil) 50mg.

The family was asked to observe Alam overnight, and to call the doctor in case of problems, otherwise he would come the next day. Not reassured, the parents called out a local faith healer, a fakir, who gave a herbal preparation to drink and 'blessed' oil to massage his body with. He said special prayers for Alam to drive out 'evil air' or 'kala batash'.

Unlike the doctor, the fakir stayed with the family and gave them much-needed moral support. Also, his treatment was free. In spite of these measures, Alam's condition deteriorated, and the doctor was called in. He examined him again, but found no evidence of any wounds, or recent history of illness.

By now Alam's temperature was 39.4°C, pulse 104/min., respiration 30/min., and he was having convulsions every three minutes. His body was rigid, but continuously twitched, and he frothed at the mouth, and coughed. At this point, the doctor confirmed a diagnosis of tetanus. The medication was changed to: 1 million units, intramuscular crystalline penicillin three times a day; intravenous tetanus toxoid 10 000 units; intramuscular diazepam (Valium) 10mg three times a day; intramuscular dexamethasone 8mg



three times a day.

No improvement was noted in patient after 24 hours. The next da medication was changed to intram lar crystalline penicillin 1.5 mega three times a day; intramuscular gactil 50mg three times a day; ivenous dextro/saline 500mls with tetanus serum 70 000 units every hours and intramuscular dexam sone 8mg three times a day.

The doctor then faced the quest whether to hospitalise Alam or keep



## CLINICAL

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The next step was to organise the place where Alam was to be nursed, and he was moved from the courtyard into the house.

It was important to maintain a clear airway in the absence of appropriate apparatus. Alam was nursed from side to side; a metal spoon served as a tongue depressor. Throughout, a close watch was kept on the pa-

tient's colour and respiration. Observations were made hourly until his condition stabilised, and then four-hourly.

Alam's mother was taught to observe the vital signs. Alam was pyrexial – at 42.7°C. Tepid sponging was given as required. Alam was spitting up phlegm, so a banana leaf served as a sputum pot.

Difficulty in swallowing made him reluctant to eat or drink, but he was cajoled and coaxed to sip water and vegetable broth. The disposal of waste material posed a problem – what to use and where to dispose of it. Broken earthen pots were eventually used as bedpans.

During the next few days, he showed no improvement. Treatment continued as prescribed, but the parents once again called the fakir to exorcise the evil air. He gave them medicated oil, instructed the parents to coax Alam to drink as much as possible and encouraged them to continue the 'modern treatment'. There was still no improvement.

A week later Alam developed pneumonia and complained of dyspnoea. Oxygen was out of question, as was sitting him upright. He continued to be nursed from side to side, tilted up on his straw bed — no mean feat. He was taught breathing exercises to no avail; physiotherapy was out of the question as he would not let anyone touch him. He then developed dropped foot. So we propped it against a 'piri' (low wooden stool) supported by a couple of bricks.

Medicines were difficult to obtain and once we had to spend a day searching for a few ampoules of Largactil. In the end we substituted with intramuscular Valium 10mg four times a day for one day.

By now, Alam's convulsions were becoming less frequent, at once every 10 to 15 minutes, and his temperature was nearly normal (37.7°C) pulse 120/min.,

respiration 32/min. He was still rigid, but not to the same degree. The sudden improvement was dramatic and almost

unbelievable.

His family had become very capable at looking after Alam, and keeping an oral record of vital signs. It was during this time, that an emergency cropped up and I had to leave for a few days. The problem then was who

could give the injections? No one in the village was capable. Eventually, a medical assistant was located, but when I returned two days later, the assistant had left, leaving Alam to the care of a fellow student who, in fact, had not turned up. Alam had therefore missed two days of antibiotics.

Fortunately, his tetanus had improved sufficiently not to relapse. Not so, his pneumonia. He was treated with a long-acting penicillin for the next week. During this time he was encouraged to move, do deep-breathing exercises and eat more.

The next week he continued to improve dramatically, and was able to walk on his own without help. Two months later he was back working.

Alam's recovery heralded a change in the villagers' attitude to vaccination and most of the children and adults were vaccinated against tetanus. They were also less scared of hospitals, doctors and medical personnel.

However, while treatment was eventually successful, the family had to borrow large sums of money, sell some of their meagre belongings, and mortgage part of their homestead to provide treatment for their son. Health care facilities are terribly inadequate in Bangladesh, people are poor, cost of drugs high and supplies inadequate. Folk healers are therefore preferred.

What is desperately needed is education to show that simple prophylactic measures, such as vaccination, will prevent the diseases occurring in the first place.

at home. The hospital was 100 miles away and expensive, which would mean the family would have to sell their homestead, and one of the parents would have to stay with Alam which would temporarily uproot the family. In the end it was decided to keep him

at home, and I was assigned to nurse him. Alam's family co-operated. The severity of the disease, the prognosis and the nursing care were explained to the family, neighbours and the fakir — who proved of invaluable assistance.

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